MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY

Piedmont Regional Office

4949-A Cox Road, Glen Allen, VA 23060-6296 804/527-5020

TO: Michael P. Murphy, Regional Director

FROM: Bradford K. Ricks, Water Permit Writer

THROUGH: Kyle Ivar Winter, P.E., Deputy Regional Director

DATE: December 4, 2014

SUBJECT: Response to Public Comments and Dispensation of Request for Public Hearing
VPDES Permit No. VA0092797
Issued to Atlantic Waste Disposal, Inc., Sussex County

Background:
Section 9VAC25-31-290 of the VPDES permit regulation requires that public notice allowing a comment period of at least 30 days be given when a draft permit has been prepared. Section 9 VAC 25-31-300 allows any interested person to submit written comments on the draft permit and may request a public hearing; all such comments shall be considered in making the final decision to issue the permit. A response to significant comments received during the public comment period must be provided.

On October 22, 2013 and October 29, 2013, the Sussex-Surry Dispatch published the public notice that draft VPDES permit No. VA0092797 for Atlantic Waste Disposal, Inc. (AWD) was available for public review and comment. The comment period ended at 11:59 pm on November 24, 2014. During the 30 day public comment period, comments were received on November 21, 2014 from one citizen, Mr. Frank Irving, Executive Director of the Sussex Service Authority (SSA). Mr. Irving's comments include a request for public hearing.

Permit Summary:
On December 20, 2013, AWD submitted initial application for a VPDES permit to discharge 200,000 gallons per day (GPD) of treated industrial wastewater generated by the AWD landfill. The applicant requested on September 3, 2014 that the draft permit be revised to provide an expansion tier to discharge 500,000 GPD.

The proposed draft permit for re-issuance contains limitations and conditions that are consistent with the Water Quality Standards (9 VAC 25-260), applicable Federal Effluent Limitation Guidelines (40 CFR 445.24), and the Assamoosick Swamp and Tributaries Bacterial TMDL. The discharge is not addressed in any planning document but will be included when the plan is updated.

The draft permit proposes to limit the following parameters:
Dissolved oxygen (DO), pH, temperature, carbonaceous biochemical oxygen demand ($cBOD_5$), total suspended solids (TSS), total Kjeldahl nitrogen (TKN), α-terpineol, benzoic acid, *p*-Cresol, phenol, and total recoverable zinc.

The Virginia Department of Health Office of Drinking Water (VDH-ODW) provided the following comment in a memorandum dated January 14, 2014, "The raw water intake for the City of Norfolk waterworks is located approximately 31 miles downstream of the areas to be disturbed. This should be sufficient distance to minimize the impacts of the disturbances." VDH has no objections to the draft permit issuance.

Comments Received During the Public Notice Period

Comments received are summarized below with DEQ Piedmont Regional Office responses provided *in italics.*

1. Concern that granting AWD a permit to discharge 500,000 GPD could result in a reduction of any proposed expansion to SSA's Black Swamp Waste Water Treatment facility (VA0088978) by 500,000 GPD.

VPDES permits are written to maintain the Virginia Water Quality Standards specified by 9VAC25-260. These regulations place limits on water quality but do not establish limitations on discharge quantity to any Tier 1 or Tier 2 waterbody such as Black Swamp. Neither the VPDES Permit Regulation (9VAC25-31) nor the Water Quality Standards authorize the Department to limit the discharge volume of any existing or expanding facility downstream of another VPDES permitted discharge.

Further, the effluent limitations for both AWD and Black Swamp have been determined in accordance with the agency's "swamp policy", which establishes default concentrations for TKN, dissolved oxygen and $cBOD_5$. *These limits are typically assigned without regard to the volume proposed to be discharged.*

DEQ staff recommends that no change to the proposed permit is necessary in response to this comment.

2. Sussex County Board of Supervisors resolution #97-079 which establishes an exclusive service area for sewage and water systems in Eastern Sussex County, potentially gives Sussex Service Authority the exclusive authority to collect and treat waste waters generated in Eastern Sussex County.

While it is noted that landfill-generated leachate is not considered sewage as defined by 9VAC25-790-10 of the Virginia Sewage Collection and Treatment Regulations, the interpretation and implementation of the referenced resolution is the responsibility of Sussex County. The applicant provided a Local Government Ordinance Form signed by the County Administrator indicating that the proposed location and operation of the facility is consistent with all ordinances adopted pursuant to Chapter 22 (§15.2-2200 et seq.) of Title 15.2 of the Code of Virginia.

One reason for AWD requesting an expansion tier for the proposed treatment works is to address the possibility that publicly owned treatment works in the Chesapeake Bay watershed may need to restrict the acceptance of leachate in order to preserve treatment capacity for nutrients from other industrial users and domestic ratepayers. AWD contemplates hauling leachate from other landfills for treatment on site; this may be construed as something other than "waste waters generated in Eastern Sussex County".

At one time, the Sussex Service Authority's Black Swamp WWTF (VA0088978) treated a fraction of the leachate generated by the AWD. Periodic exceedances of Black Swamp's TKN effluent limitations were attributed to treatment of the leachate, even after the TKN limit was relaxed. In order to resolve these effluent limitation exceedances, SSA agreed to suspend the acceptance of leachate from AWD. While SSA left open the possibility of accepting leachate in the future, DEQ has received no correspondence from SSA (aside from the referenced comment letter) to this effect.

DEQ staff recommends that no change to the proposed permit is necessary in response to this comment.

3. Concern that if partially treated or untreated wastewater enters the Potomac Aquifer through the receiving pond or wetlands, drinking water provided by this groundwater source would be affected. This concern includes a request that the Piedmont Regional Office seek an opinion from the DEQ Office of Surface and Groundwater Supply.

In response to the above inquiry, DEQ Groundwater Withdrawal Permitting Program Manager, Craig Nicol provided the following statement:

"The Stony Creek area to the west of Waverly (close to the fall line) does have this situation where the surface water appears to be hydraulically connected to the Potomac Aquifer. The confining units are thin and are highly dissected by streams causing aquifers to outcrop along major rivers and generally transition from confined to unconfined.

However, this situation does not extend to the more eastern areas such as Waverly and Black Swamp. Given information from Waverly and the SSA Northeastern Regional Water Systems this should not be a concern."

As VPDES discharge permits are prepared to protect surface waters in accordance with the Virginia Water Quality Standards, these requirements are also established to protect groundwater. Any untreated wastewaters discharged to pits, ponds, or lagoons are required to have controls to prevent possible impacts to groundwater. This proposed permit does not authorize the storage of untreated wastewaters in pits, ponds, or lagoons. With the exception of dissolved oxygen, all effluent limitations must be met before being discharged to the receiving pond.

DEQ staff recommends that no change to the proposed permit is necessary in response to this comment.

4. Request for explanation of the increase in average discharge flow from 200,000 GPD to 500,000 GPD.

During discussions regarding the initial draft permit, AWD became aware that significant fees would be incurred if they desired to expand the facility at a future date during the term of the permit. In order to provide the ability to expand in this permit, AWD requested that the permit include two flow tiers: initial facility construction to discharge 200,000 GPD and a second flow tier to provide for facility expansion to 500,000 GPD.

DEQ staff recommends that no change to the proposed permit is necessary in response to this comment.

5. Why was Sussex County not notified of the increase in average discharge flow from 200,000 GPD to 500,000 GPD?

The applicant provided approved Local Government Ordinance Forms for the initial request to discharge 200,000 GPD and for the revised request to discharge 500,000 GPD. The revised form requesting approval for the 500,000 GPD discharge was submitted to Sussex County in late October and the approved form was received by the Department on December 4, which may explain why the Sussex Service Authority was not aware of the proposed increase at the time of permit public notice.

DEQ staff recommends that no change to the proposed permit is necessary in response to this comment.

6. Request for a public hearing to inform Sussex County residents of the details of the proposed facility.

In accordance with agency policy and guidance, permit development supporting documentation is included in and/or attached to the proposed fact sheet. Area residents received notice of the draft permit including the ability to review the permit, application, and supporting documentation via notice in the Sussex-Surry Dispatch on October 22 and October 29, 2014. The public comment period continued until November 24, 2014. The Department received one request for a public hearing.

List of Commenters (Copies of all comments are attached)
Frank Irving, Executive Director, Sussex Service Authority

Criteria for Dispensing Requests for Public Hearing:
§62.1-44.15:02.C of the *Code of Virginia* and 9VAC 25-230-50.A of Procedural Rule No. 1 states that for a public hearing to be granted, the Director must find there is: a) significant public interest; b) there are substantial, disputed issues relevant to the issuance of the permit in question; and c) the action requested is not on its face inconsistent with, or in violation of, the State Water Control Law, federal law or any

regulation promulgated thereunder. §62.1-44.15:02.C.1 of the *Code* further defines significant public interest as evidenced by the receipt of a minimum of 25 individual requests for public hearing or Board consideration. Alternatively, §62.1-44.15:02.F of the *Code*, allows for the Director, at his discretion, to convene a public hearing on a permit action or submit a permit action to the Board for its consideration.

Staff Recommendations:
Staff finds the number of individual requests for public hearing received does not meet the statutory requirements of significant public interest to qualify for convening a public hearing for the issuance of VPDES permit VA0092797, Atlantic Waste Disposal, Inc.

In addition, DEQ staff finds the proposed VPDES discharge permit VA0092797 to have been prepared in accordance with all applicable statutes, regulations and agency practices; the effluent limits and conditions in the permit have been adequately established to protect instream beneficial uses, fish and wildlife resources, and to maintain all applicable water quality standards; and all public comments relevant to the permit have been considered. It is further recommended the Director direct staff to proceed with approving reissuance of VPDES permit VA0092797 as public noticed.

STAFF CONTACT:
Bradford Ricks
DEQ Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060
Phone: (804)527-5129
Email: Bradford.Ricks@deq.virginia.gov

APPROVED: _____
Michael P. Murphy
Piedmont Regional Director

DATE: December 11, 2014

4385 Beef Steak Road
Waverly, Virginia 23890
Phone: (804) 834-8930
Fax: (804) 834-8933

Sussex Service Authority

November 21, 2014

Mr. Brad Ricks
Virginia DEQ, Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

VIA: Email on 11/21/14
Original by U.S. Mail

Dear Mr. Ricks:

I am writing in response to the public notice published in the October 22, 2014 Sussex Surry Dispatch concerning Atlantic Waste Disposal, Inc. requested permit VA0092797. As Director of the Sussex Service Authority, located at 4385 Beef Steak Road, Waverly, VA., I have several major concerns over this permit being granted.

My first major concern is that our Black Swamp Waste Water Treatment facility is currently permitted to discharge 600,000 gallons per day to the Black Swamp. We currently have over 300,000 gallons per day of available excess capacity at our Black Swamp facility.
We have plans to increase capacity of our Black Swamp Wastewater Treatment Facility to 1.6 million gallons per day in anticipation of Sussex County's Industrial Mega-Site for which land has been secured and is currently being marketed by the County and State officials. We are concerned that granting Atlantic Waste Disposal, Inc. a permit to discharge into Black Swamp could decrease our planned 1 million gallon per day increase by 500,000 gallons per day thus affecting development of the Industrial Mega-Site. Also, as per the attached resolution (#97-079) the County of Sussex has established an exclusive service area for sewage and water systems in Eastern Sussex County. We believe this ordinance gives Sussex Service Authority the exclusive authority to collect and treat waste waters generated in Eastern Sussex County.

Secondly, the facility will discharge treated industrial waste waters into a man-made water body (lake) which discharges to man-made wetlands before final discharge to Black Swamp. This water body we believe is connected hydraulically to the groundwater aquifer in our area. The Authority is very concerned of how this will affect the Potomac aquifer that we withdraw water from. If any partially treated or untreated waste water enters this water body, our groundwater source would be affected. The wells for our Northeastern Regional Water System withdraw water from the Potomac Aquifer to supply the Department of Corrections Sussex I & Sussex II facilities. Any contamination of the Potomac Aquifer would require us to install additional treatment equipment to maintain acceptable water quality. We question whether the DEQ Office of Surface & Ground Water Supply has been involved in the review of this permit application. An opinion from this office should be sought since the water body is believed to be connected to an aquifer located in the Eastern Virginia Ground Water Management Area.

Thirdly, the original application submitted to you on December 6, 2013 by Brown and Caldwell stated that the system will be designed for an average flow rate capacity of 200,000 gpd with a peak hydraulic capacity of 250,000 gpd. When an increase was requested, why was Sussex County not notified? Please explain the reason for the increase. We believe a public hearing should be held to inform the residents of Sussex County the details of the proposed facility.

I would be happy to discuss any of these concerns with you and look forward to hearing back from you.

Sincerely,

Frank Irving
Executive Director

CC: Ms Deborah Davis, Sussex County Administrator
Mr. Andre Greene, Sussex County Director of Planning
Sussex County Supervisors
Sussex Service Authority Board Members
Mr. Scott Kudlas, Virginia DEQ

Resolution #97-079

At a meeting of the Board of Supervisors of the County of Sussex held at the Courthouse thereof, on the 17th day of October 1996.

PRESENT:	VOTE:
Charlie E. Caple, Jr.	aye
J. Lafayette Edmond	aye
Robbie F. Owen	aye
Eldridge Lucas, III	aye
Russell L. Westbrook	aye
Rufus E. Tyler	ABSTAIN

ABSENT:

RESOLVED that the Board of Supervisors of the County of Sussex, Virginia hereby approves this 17th day of October 1996:

AN ORDINANCE TO ESTABLISH AN EXCLUSIVE SERVICE AREA FOR A SEWAGE AND WATER SYSTEM WITHIN SUSSEX COUNTY, VIRGINIA, INCLUDING FIXING OF RATES OR CHARGES THEREFOR AND THE PROHIBITION, RESTRICTION OR REGULATION OF ENTITIES PROVIDING SUCH SERVICES, TO PROVIDE FOR ENFORCEMENT THEREOF AND PENALTIES FOR VIOLATION AS PROVIDED BY VIRGINIA CODE 15.1-292.2.

BE IT ORDAINED BY THE BOARD OF SUPERVISORS OF SUSSEX COUNTY pursuant to its authority granted in Section 15.1-292.2 of the Code of Virginia as follows, to-wit:

SECS. 15-5. INTENT TO REGULATE.

The Board of Supervisors does hereby exercise its powers to regulate sewage collection, treatment and disposal service and water service notwithstanding any anti-competitive effect.

SEC. 15-5-A. EXCLUSIVE SERVICE AREA, EASTERN SUSSEX.

That part of Sussex County lying and being east of the north - south division of the County by a line coterminous with State Route No. 35, also known as Jerusalem Plank Road, where there exists, or there is contemplated, a water main or a sanitary sewer collection line reasonably available or to be available as determined by the Sussex Department of Public Utilities for service of every lot or parcel of land therein.

SEC. 15-5-B. AUTHORITY TO FIX AND ESTABLISH RATES OR CHARGES.

The Board of Supervisors may from time to time fix and establish rates, charges, connection fees or proffers by resolution and when so adopted and published shall be the rates and charges for the Department of Public Utilities. A proffer required by such schedule shall be deemed to be a part thereof. Charges may include front footage charges.

SEC. 15-5-C. PROHIBITIONS IN EXCLUSIVE AREAS.

No person, firm, corporation or other entity shall construct, install or use or permit to be used any potable water delivery system or sewage collection system within an exclusive service area designated by the Board of Supervisors in Sussex County without obtaining a permit.

SEC. 15-5-D. PERMITS REQUIRED.

No person, firm, corporation, or other entity shall construct, install or use or permit to be used a potable water delivery system or sewage collection system without first applying for and receiving a permit for such system.

SEC. 15-5-E. WATER AND SEWAGE COLLECTION SYSTEM DEFINED.

1. Potable - shall mean water suitable in quality for human consumption or intended therefor.

2. Water System - the entire water delivery and treatment system of Sussex County from the point or place of origin to the point of delivery to the consumer.

3. Sewage Collection System - the entire sewage collection system of Sussex County from the point of connection at the property line to the point of discharge.

4. As to both the water system and sewage collection system all public systems permitted by the County shall be deemed to be a part of said system and subject to regulation, fees and control of Sussex County.

SEC. 15-5-F. PENALTIES FOR VIOLATION.

Any person, firm, corporation or other entity violating any provision hereof shall be punished in accordance with Virginia Code, 1950, Section 15.1-348, as from time-to-time amended or recodified.

SEC. 15-5-G. EFFECTIVE DATE.

This ordinance shall be effective from its adoption.

SEC. 15-6. MASTER PLAN.

The Sussex County "Water and Sewer Utilities Master Plan for Eastern Sussex County" duly adopted on September 19, 1996 and amendments and successive master plans are and shall be the Master Plan for Sussex County.

COPY TESTE:

Mary E. Jones
Clerk

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0092797
Effective Date: January 1, 2015
Expiration Date: December 31, 2019

AUTHORIZATION TO DISCHARGE UNDER THE

VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM

AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit, as set forth herein.

OWNER:	Atlantic Waste Disposal, Inc.
FACILITY NAME:	Atlantic Waste Disposal
COUNTY:	Sussex County
FACILITY LOCATION:	3474 Atlantic Lane Waverly, VA 23890

The owner is authorized to discharge to the following receiving streams:

STREAM:	Black Swamp
RIVER BASIN:	Chowan and Dismal Swamp
RIVER SUBBASIN:	Chowan River
SECTION:	2b
CLASS:	VII
SPECIAL STANDARDS:	None

Deputy Regional Director, Piedmont Regional Office

16 DECEMBER 2014

Date

A. Limitations and Monitoring Requirements

1. During the period beginning with the permit's effective date and lasting until DEQ approval to operate the 0.50 MGD facility or the permit's expiration date, whichever comes first, the permittee is authorized to discharge from Outfall 001 of the 0.20 MGD facility.
   a. Such discharges shall be limited and monitored at Outfall 001 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	MONTHLY AVERAGE		WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM		FREQUENCY	SAMPLE TYPE
Flow (MGD)	NL		NA	NA	NL		1 per Month	TIRE
pH (standard units)	NA		NA	6.0	7.3		1 per Month	Grab
Temperature (degrees C)	NA		NA	NA	30[1]		1 per Month	Grab
Five Day Carbonaceous Biochemical Oxygen Demand ($cBOD_5$)	10[1] mg/L	7,600[1] g/d	NA	NA	20[1] mg/L	15,000[1] g/d	1 per Month	Grab
Total Suspended Solids (TSS)	10[1] mg/L	7,600[1] g/d	NA	NA	20[1] mg/L	15,000[1] g/d	1 per Month	Grab
Total Kjeldahl Nitrogen (TKN)	3.0 mg/L	2,300[1] g/d	NA	NA	6.0 mg/L	4,500[1] g/d	1 per Month	Grab
Dissolved Oxygen (DO) (mg/L)	NA		NA	5.0	NA		1 per Month	Grab
Alpha – Terpineol (µg/L)	16		NA	NA	33		1 per Month	Grab
Benzoic Acid (µg/L)	71		NA	NA	120[1]		1 per Month	Grab
p-Cresol (µg/L)	14		NA	NA	25		1 per Month	Grab
Phenol (µg/L)	15		NA	NA	26		1 per Month	Grab
Total Recoverable Zinc (µg/L)	36		NA	NA	36		1 per Month	Grab

TIRE = Totalizing, Indicating, and Recording equipment
NL = No Limit, monitoring and reporting required
NA = Not Applicable
[1] Limitation is expressed in 2 significant digits.

   b. There shall be no discharge of floating solids or visible foam in other than trace amounts.
   c. See monitoring and reporting requirements in Part I.B.7.
   d. No later than 10 days prior to the commencement of discharge from the facility, the permittee shall submit written notification to DEQ which provides the first day of discharge. This first day of discharge will be used as the trigger date for all other permit conditions which drive off the commencement of discharge. Monitoring and reporting are not required until the commencement of this discharge.
   e. To demonstrate compliance with Part I.A.1, samples shall be taken at Outfall 001, discharge following treatment. Dissolved oxygen samples shall be taken at the discharge from the pond which receives treated effluent.

A. Limitations and Monitoring Requirements

2. During the period beginning with DEQ approval to operate the 0.50 MGD facility and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 001.
   a. Such discharges shall be limited and monitored at Outfall 001 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	MONTHLY AVERAGE		WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM		FREQUENCY	SAMPLE TYPE
Flow (MGD)	NL		NA	NA	NL		1 per Month	TIRE
pH (standard units)	NA		NA	6.0	7.3		1 per Month	Grab
Temperature (degrees C)	NA		NA	NA	30[1]		1 per Month	Grab
Five Day Carbonaceous Biochemical Oxygen Demand ($cBOD_5$)	10[1] mg/L	19,000[1] g/d	NA	NA	20[1] mg/L	38,000[1] g/d	1 per Month	Grab
Total Suspended Solids (TSS)	10[1] mg/L	19,000[1] g/d	NA	NA	20[1] mg/L	38,000[1] g/d	1 per Month	Grab
Total Kjeldahl Nitrogen (TKN)	3.0 mg/L	5,700[1]g/d	NA	NA	6.0 mg/L	11,000[1] g/d	1 per Month	Grab
Dissolved Oxygen (DO) (mg/L)	NA		NA	5.0	NA		1 per Month	Grab
Alpha – Terpineol (µg/L)	16		NA	NA	33		1 per Month	Grab
Benzoic Acid (µg/L)	71		NA	NA	120[1]		1 per Month	Grab
p-Cresol (µg/L)	14		NA	NA	25		1 per Month	Grab
Phenol (µg/L)	15		NA	NA	26		1 per Month	Grab
Total Recoverable Zinc (µg/L)	36		NA	NA	36		1 per Month	Grab

TIRE = Totalizing, Indicating, and Recording equipment
NL = No Limit, monitoring and reporting required
NA = Not Applicable
[1] Limitation is expressed in 2 significant digits.

   b. There shall be no discharge of floating solids or visible foam in other than trace amounts.
   c. See monitoring and reporting requirements in Part I.B.7.
   d. No later than 10 days prior to the commencement of discharge from the facility, the permittee shall submit written notification to DEQ which provides the first day of discharge. This first day of discharge will be used as the trigger date for all other permit conditions which drive off the commencement of discharge. Monitoring and reporting are not required until the commencement of this discharge.
   e. To demonstrate compliance with Part I.A.2, samples shall be taken at Outfall 001, discharge following treatment. Dissolved Oxygen samples shall be taken at the discharge from the pond which receives treated effluent.

B. Special Conditions

1. New Source Water Quality Monitoring

a. 0.20 MGD Facility

(1) In accordance with the requirements of VPDES application Form 2D, the permittee shall complete and submit Items V and VI of Form 2C no later than two years following the commencement of discharge or with the permit reissuance application if that application due date is less than two years after the commencement of discharge for each outfall. Following an evaluation of the required information, this permit may be modified or, alternatively, revoked and reissued in order to incorporate additional or different permit conditions.

(2) The permittee shall monitor the effluent at Outfall 001 for the substances noted in Attachment A, "Water Quality Criteria Monitoring" according to the indicated analysis number, quantification level, sample type and frequency. The *E. coli* monitoring requirement specified therein shall include six samples at a frequency of one sample per month. Monitoring shall be initiated within 180 days of the commencement of discharge from Outfall 001. Using Attachment A as the reporting form, the data shall be submitted with the first DMR due after the monitoring is completed. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A.

b. 0.50 MGD Facility

(1) The permittee shall monitor the effluent at Outfall 001 for the substances noted in Attachment A, "Water Quality Criteria Monitoring" according to the indicated analysis number, quantification level, sample type and frequency. Monitoring shall be initiated within 180 days of the commencement of discharge from Outfall 001 of the 0.50 MGD facility. Using Attachment A as the reporting form, the data shall be submitted with the first DMR due after the monitoring is completed. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A.

2. Whole Effluent Toxicity (WET) Monitoring Requirements:

a. Beginning with the first complete calendar quarter after the commencement of discharge, the permittee shall conduct acute and chronic toxicity tests once per complete calendar quarter with samples collected from Outfall 001 until such time that 10 data sets are collected.

The acute tests to use that make up a set are:

48-hour Static Acute Test using *Ceriodaphnia dubia; and*
48-hour Static Acute Test using *Pimephales promelas*

These acute tests are to be conducted using 5 geometric dilutions of effluent with a minimum of 4 replicates, with 5 organisms in each. The NOAEC (No Observed Adverse Effect Concentration), as determined by hypothesis testing, shall be reported separately from the DMR on the 10th of the month following the end of each calendar quarter. The Lethal Concentration to 50% of the sample population (LC_{50}) shall also be determined and noted on the submitted report. Tests in which control survival is less than 90% are not acceptable. A retest of a non-acceptable test must be performed during the same compliance period as the test it is replacing.

The chronic tests to use are:

Chronic 3-Brood Survival and Reproduction Static Renewal Test with *Ceriodaphnia dubia;* and
Chronic 7-Day Survival and Growth Static Renewal Test with *Pimephales promelas.*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be determined (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. A restest of a non-acceptable test must be performed during the same compliance period as the test it is replacing. Express the test NOEC results as TU_c (Chronic Toxic Units), by dividing 100/NOEC. Report the Lethal Concentration to 50% of the sample population (LC_{50}) at 48 hours and the 25% Inhibition Concentration (IC_{25}) with the NOEC's in the test report.

b. The test dilutions should be able to determine compliance with the following endpoints:

Acute NOAEC = 100%
Chronic NOAEC $\geq$ 69%, equivalent to a TUc $\geq$ 1.44

c. The permittee shall collect composite samples of effluent from Outfall 001. Each composite sample shall consist of grab samples collected hourly for 24 hours. If the discharge is less than 24 hours in duration, hourly grab samples shall be taken and composited for the duration of the discharge. Additional information to be supplied with the test report shall include:

1. An estimate of the total volume discharged through Outfall 001 and the duration of the discharge;

2. The time at which the discharge was initiated if not continuous; and

3. The time at which sampling was initiated.

d. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

e. The test data will be evaluated statistically for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests of I.B.2.a. may be discontinued.

f. The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

g. The permittee shall submit a copy of each toxicity test report to the Piedmont Regional Office by the 10th of the month following the quarter in which the testing was performed. Calendar quarters are defined as January – March, April – June, July – September, October – December.

3. Notification Levels

The permittee shall notify the Department as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 µg/l);

(2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the Board.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter (500 µg/l);

(2) One milligram per liter (1 mg/L) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the Board.

4. Operation and Maintenance Manual Requirement

The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31. This manual shall be developed no later than 60 days prior to the commencement of discharge.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M Manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and approval.

The O&M manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent, storm water, and sludge samples;

b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;

c. Discussion of Best Management Practices, if applicable;

d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.B. 6 that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility;

e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;

f. Plan for the management and/or disposal of waste solids and residues;

g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;

h. List of facility, local and state emergency contacts; and,

i. Procedures for reporting and responding to any spills/overflows/treatment works upsets.

5. Licensed Operator Requirement

The permittee shall employ or contract at least one Class III licensed wastewater works operator for the facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

6. Materials Handling/Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

7. Compliance Reporting

a. The quantification levels (QL) shall be less than or equal to the following concentrations:

Effluent Parameter	Quantification Level
BOD_5	2 mg/L
Total Suspended Solids (TSS)	1.0 mg/L
Ammonia (as N)	0.2 mg/L
Alpha-Terpineol	0.016 mg/L
Benzoic Acid	0.071 mg/L
p-Cresol	0.014 mg/L
Phenol	0.015 mg/L
Total Recoverable Zinc	2.0 µg/L

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II A of this permit.

b. Monthly Average -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities. For monitoring frequencies encompassing multiple months, the monthly average value to be reported on the DMR shall be the maximum of the arithmetic monthly averages calculated for each calendar month during the monitoring period.

Daily Maximum -- Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum is <QL, then report "<QL" for the quantity. Otherwise use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month. For monitoring frequencies encompassing multiple months, the daily maximum value to be reported on the DMR shall be the maximum of the arithmetic daily averages calculated for each calendar day during the monitoring period.

c. Single Datum -- Any single datum required shall be reported as "<QL" if it is less than the QL used in the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.

d. Significant Digits -- The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

8. Total Maximum Daily Load (TMDL) Reopener

   This permit may be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements;

9. Water Quality Criteria Reopener

   Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

10. Facility Closure Plan

    If the permittee plans an expansion or upgrade to replace the existing treatment works, or if facilities are permanently closed, the permittee shall submit to the DEQ Piedmont Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ Piedmont Regional Office prior to implementation. Once approved, the plan shall become an enforceable part of this permit and closure shall be implemented in accordance with the approved plan. No later than 14 calendar days following closure completion, the permittee shall submit to the DEQ Piedmont Regional Office written notification of the closure completion date and a certification of closure in accordance with the approved plan.

11. Concept Engineering Report (CER)

    Prior to constructing any wastewater treatment works or expanding the facility from 0.20 MGD to 0.50 MGD, the permittee shall submit a Concept Engineering Report (CER) to the DEQ Piedmont Regional Office. DEQ written approval shall be secured prior to constructing any wastewater treatment works. The permittee shall construct the wastewater treatment works in accordance with the approved CER. No later than 14 days following completion of construction of any project for which a CER has been approved, written notification shall be submitted to the DEQ Piedmont Regional Office certifying that, based on an inspection of the project, construction was completed in accordance with the approved CER. The written notification shall be certified by a professional engineer licensed in the Commonwealth of Virginia or signed in accordance with Part II.K of this permit. The installed wastewater treatment works shall be operated to achieve design treatment and effluent concentrations. Approval by the DEQ does not relieve the owner of the responsibility for the correction of design and/or operational deficiencies. Noncompliance with the CER shall be deemed a violation of this permit.

12. Indirect Dischargers: The facility is authorized to accept, treat, and discharge liquids associated with solid waste management operations from off-site sources. The permittee shall submit to the DEQ Piedmont Regional Office for approval: any substantial change in the character of pollutants being introduced into the treatment works by an offsite source not introducing pollutants into the treatment works at the time of issuance of this permit. Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.

   a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.

   b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

   c. Samples taken shall be analyzed by a laboratory certified under 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A 1 a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.

3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

1. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements;

   b. The individual(s) who performed the sampling or measurements;

   c. The date(s) and time(s) analyses were performed;

   d. The individual(s) who performed the analyses;

   e. The analytical techniques or methods used; and

   f. The results of such analyses.

2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit by hard

copy or by E-DMR not later than the 10th day of the month after the required monitoring period, unless another reporting schedule is specified elsewhere in this permit. Monitoring results sent by hard copy shall be submitted to:

DEQ - Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved, or specified by the Department.
3. Calculations for all limits which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges.

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F 1; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F 1, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;

5. The volume of the discharge;

6. If the discharge is continuing, how long it is expected to continue;

7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit. Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;

2. Breakdown of processing or accessory equipment;

3. Failure or taking out of service some or all of the treatment works; and

4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:

    a. Any unanticipated bypass; and

    b. Any upset which causes a discharge to surface waters.

2. A written report shall be submitted within 5 days and shall contain:

    a. A description of the noncompliance and its cause;

    b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

    c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

    The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall

contain the information listed in Part II I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I shall be made to the Department's Regional Office at pro.SSO-UD@deq.virginia.gov or (804) 572-5020. For telephone reports outside normal working hours (before 8:30 am and after 5:00 pm Monday through Friday and anytime Saturday through Sunday), follow the instructions on the voicemail to reach the appropriate staff. For emergencies, the Virginia Department of Emergency Management maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

      (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or

      (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or

   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:

   a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulation; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been

assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Part II K 1;

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

   c. The written authorization is submitted to the Department.

3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Parts II K 1 or 2 shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the

regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate licensed operator staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been

necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limits to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II U 2 and U 3.

2. Notice
   a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
   b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.

3. Prohibition of bypass.
   a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
      (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      (3) The permittee submitted notices as required under Part II U 2.

   b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limits if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
   a. An upset occurred and that the permittee can identify the cause(s) of the upset;
   b. The permitted facility was at the time being properly operated; and
   c. The permittee submitted notice of the upset as required in Part II I 2.
   d. The permittee complied with any remedial measures required under Part II S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection time unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of Permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
    a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
    b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
    c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

ATTACHMENT A
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY CRITERIA MONITORING

Effective January 1, 2012, all analyses shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

A listing of Virginia Environmental Laboratory Accreditation Program (VELAP) certified and/or accredited laboratories can be found at the following website:
http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx

Please be advised that additional water quality analyses may be necessary and/or required for permitting purposes.

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL(1)	REPORTING RESULTS	SAMPLE TYPE(2)	SAMPLE FREQUENCY
METALS						
7440-36-0	Antimony, dissolved	(3)	1.4		G or C	1/5 YR
7440-38-2	Arsenic, dissolved	(3)	1.0		G or C	1/5 YR
7440-43-9	Cadmium, dissolved	(3)	0.3		G or C	1/5 YR
16065-83-1	Chromium III, dissolved (6)	(3)	3.6		G or C	1/5 YR
18540-29-9	Chromium VI, dissolved (6)	(3)	1.6		G or C	1/5 YR
7440-50-8	Copper, dissolved	(3)	0.50		G or C	1/5 YR
7439-92-1	Lead, dissolved	(3)	0.50		G or C	1/5 YR
7439-97-6	Mercury, dissolved	(3)	1.0		G or C	1/5 YR
7440-02-0	Nickel, dissolved	(3)	0.94		G or C	1/5 YR
7782-49-2	Selenium, Total Recoverable	(3)	2.0		G or C	1/5 YR
7440-22-4	Silver, dissolved	(3)	0.20		G or C	1/5 YR
7440-28-0	Thallium, dissolved	(3)	(4)		G or C	1/5 YR
7440-66-6	Zinc, dissolved	(3)	3.6		G or C	1/5 YR
PESTICIDES/PCBs						
309-00-2	Aldrin	608/625	0.05		G or C	1/5 YR
57-74-9	Chlordane	608/625	0.2		G or C	1/5 YR
2921-88-2	Chlorpyrifos (synonym = Dursban)	622	(4)		G or C	1/5 YR
72-54-8	DDD	608/625	0.1		G or C	1/5 YR
72-55-9	DDE	608/625	0.1		G or C	1/5 YR
50-29-3	DDT	608/625	0.1		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
8065-48-3	Demeton (synonym = Dementon-O,S)	622	(4)		G or C	1/5 YR
333-41-5	Diazinon	622	(4)		G or C	1/5 YR
60-57-1	Dieldrin	608/625	0.1		G or C	1/5 YR
959-98-8	Alpha-Endosulfan (synonym = Endosulfan I)	608/625	0.1		G or C	1/5 YR
33213-65-9	Beta-Endosulfan (synonym = Endosulfan II)	608625	0.1		G or C	1/5 YR
1031-07-8	Endosulfan Sulfate	608/625	0.1		G or C	1/5 YR
72-20-8	Endrin	608/625	0.1		G or C	1/5 YR
7421-93-4	Endrin Aldehyde	608/625	(4)		G or C	1/5 YR
86-50-0	Guthion (synonym = Azinphos Methyl)	622	(4)		G or C	1/5 YR
76-44-8	Heptachlor	608/625	0.05		G or C	1/5 YR
1024-57-3	Heptachlor Epoxide	608/625	(4)		G or C	1/5 YR
319-84-6	Hexachlorocyclohexane Alpha-BHC	608/625	(4)		G or C	1/5 YR
319-85-7	Hexachlorocyclohexane Beta-BHC	608/625	(4)		G or C	1/5 YR
58-89-9	Hexachlorocyclohexane Gamma-BHC (syn. = Lindane)	608/625	(4)		G or C	1/5 YR
143-50-0	Kepone	8081 Extended/ 8270C/8270D	(4)		G or C	1/5 YR
121-75-5	Malathion	614	(4)		G or C	1/5 YR
72-43-5	Methoxychlor	608.2	(4)		G or C	1/5 YR
2385-85-5	Mirex	8081 Extended/ 8270C/8270D	(4)		G or C	1/5 YR
56-38-2	Parathion (synonym = Parathion Ethyl)	614	(4)		G or C	1/5 YR
1336-36-3	PCB, total	608/625	7.0		G or C	1/5 YR
8001-35-2	Toxaphene	608/625	5.0		G or C	1/5 YR
BASE NEUTRAL EXTRACTABLES						
83-32-9	Acenaphthene	610/625	10.0		G or C	1/5 YR
120-12-7	Anthracene	610/625	10.0		G or C	1/5 YR
92-87-5	Benzidine	625	(4)		G or C	1/5 YR
56-55-3	Benzo (a) anthracene	610/625	10.0		G or C	1/5 YR
205-99-2	Benzo (b) fluoranthene	610/625	10.0		G or C	1/5 YR
207-08-9	Benzo (k) fluoranthene	610/625	10.0		G or C	1/5 YR
50-32-8	Benzo (a) pyrene	610/625	10.0		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
111-44-4	Bis 2-Chloroethyl Ether	625	(4)		G or C	1/5 YR
108-60-1	Bis 2-Chloroisopropyl Ether	625	(4)		G or C	1/5 YR
117-81-7	Bis 2-Ethylhexyl Phthalate (syn. = Di-2-Ethylhexyl Phthalate)	625	10.0		G or C	1/5 YR
85-68-7	Butyl benzyl phthalate	625	10.0		G or C	1/5 YR
91-58-7	2-Chloronaphthalene	625	(4)		G or C	1/5 YR
218-01-9	Chrysene	610/625	10.0		G or C	1/5 YR
53-70-3	Dibenzo (a,h) anthracene	610/625	20.0		G or C	1/5 YR
95-50-1	1,2-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
541-73-1	1,3-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
106-46-7	1,4-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
91-94-1	3,3-Dichlorobenzidine	625	(4)		G or C	1/5 YR
84-66-2	Diethyl phthalate	625	10.0		G or C	1/5 YR
131-11-3	Dimethyl phthalate	625	(4)		G or C	1/5 YR
84-74-2	Di-n-butyl Phthalate (synonym = Dibutyl Phthalate)	625	10.0		G or C	1/5 YR
121-14-2	2,4-Dinitrotoluene	625	10.0		G or C	1/5 YR
122-66-7	1,2-Diphenylhydrazine	625/ 8270C/8270D	(4)		G or C	1/5 YR
206-44-0	Fluoranthene	610/625	10.0		G or C	1/5 YR
86-73-7	Fluorene	610/625	10.0		G or C	1/5 YR
118-74-1	Hexachlorobenzene	625	(4)		G or C	1/5 YR
87-68-3	Hexachlorobutadiene	625	(4)		G or C	1/5 YR
77-47-4	Hexachlorocyclopentadiene	625	(4)		G or C	1/5 YR
67-72-1	Hexachloroethane	625	(4)		G or C	1/5 YR
193-39-5	Indeno(1,2,3-cd)pyrene	610/625	20.0		G or C	1/5 YR
78-59-1	Isophorone	625	10.0		G or C	1/5 YR
98-95-3	Nitrobenzene	625	10.0		G or C	1/5 YR
62-75-9	N-Nitrosodimethylamine	625	(4)		G or C	1/5 YR
621-64-7	N-Nitrosodi-n-propylamine	625	(4)		G or C	1/5 YR
86-30-6	N-Nitrosodiphenylamine	625	(4)		G or C	1/5 YR
129-00-0	Pyrene	610/625	10.0		G or C	1/5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
VOLATILES						
107-02-8	Acrolein	624	(4)		G	1/5 YR
107-13-1	Acrylonitrile	624	(4)		G	1/5 YR
71-43-2	Benzene	602/624	10.0		G	1/5 YR
75-25-2	Bromoform	624	10.0		G	1/5 YR
56-23-5	Carbon Tetrachloride	624	10.0		G	1/5 YR
108-90-7	Chlorobenzene (synonym = Monochlorobenzene)	602/624	50.0		G	1/5 YR
124-48-1	Chlorodibromomethane	624	10.0		G	1/5 YR
67-66-3	Chloroform	624	10.0		G	1/5 YR
75-27-4	Dichlorobromomethane	624	10.0		G	1/5 YR
107-06-2	1,2-Dichloroethane	624	10.0		G	1/5 YR
75-35-4	1,1-Dichloroethylene	624	10.0		G	1/5 YR
156-60-5	1,2-trans-dichloroethylene	624	(4)		G	1/5 YR
78-87-5	1,2-Dichloropropane	624	(4)		G	1/5 YR
542-75-6	1,3-Dichloropropene	624	(4)		G	1/5 YR
100-41-4	Ethylbenzene	602/624	10.0		G	1/5 YR
74-83-9	Methyl Bromide (synonym = Bromomethane)	624	(4)		G	1/5 YR
75-09-2	Methylene Chloride (synonym = Dichloromethane)	624	20.0		G	1/5 YR
79-34-5	1,1,2,2-Tetrachloroethane	624	(4)		G	1/5 YR
127-18-4	Tetrachloroethylene (synonym = Tetrachloroethene)	624	10.0		G	1/5 YR
10-88-3	Toluene	602/624	10.0		G	1/5 YR
79-00-5	1,1,2-Trichloroethane	624	(4)		G	1/5 YR
79-01-6	Trichloroethylene (synonym = Trichloroethene)	624	10.0		G	1/5 YR
75-01-4	Vinyl Chloride	624	10.0		G	1/5 YR
ACID EXTRACTABLES						
95-57-8	2-Chlorophenol	625	10.0		G or C	1/5 YR
120-83-2	2,4 Dichlorophenol	625	10.0		G or C	1/5 YR
105-67-9	2,4 Dimethylphenol	625	10.0		G or C	1/5 YR
51-28-5	2,4-Dinitrophenol	625	(4)		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[(1)]	REPORTING RESULTS	SAMPLE TYPE[(2)]	SAMPLE FREQUENCY
534-52-1	2-Methyl-4,6-Dinitrophenol	625	(4)		G or C	1/5 YR
25154-52-3	Nonylphenol	ASTM D 7065-06	(4)		G or C	1/5 YR
87-86-5	Pentachlorophenol	625	50.0		G or C	1/5 YR
108-95-2	Phenol	625	10.0		G or C	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0		G or C	1/5 YR
MISCELLANEOUS						
776-41-7	Ammonia as NH3-N	350.1	200		C	1/5 YR
16887-00-6	Chloride	(3)	(4)		C	1/5 YR
7782-50-5	Chlorine, Total Residual	(3)	100		G	1/5 YR
57-12-5	Cyanide, Free [(8)]	ASTM 4282-02	10.0		G	1/5 YR
N/A	*E. coli* (N/CML)	(3)	(4)		G	1/Month for 6 Months
18496-25-8	Sulfide, dissolved [(7)]	SM 4500 S^2 B	100		G or C	1/5 YR
60-10-5	Tributyltin	(5)	(4)		G or C	1/5 YR
471-34-1	Hardness (mg/L as $CaCO_3$)	(3)	(4)		G or C	1/5 YR

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Name of Principal Executive Officer or Authorized Agent & Title

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Signature of Principal Executive Officer or Authorized Agent & Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(1) Quantification level (QL) means the minimum levels, concentrations, or quantities of a target variable (e.g. target analyte) that can be reported with a specified degree of confidence in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information (i.e. laboratory certificates of analysis) shall be submitted to document that the required quantification level has been attained.

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

(3) A specific analytical method is not specified; however, an appropriate method to meet the QL shall be selected from any approved method presented in 40 CFR Part 136.

(4) The QL is at the discretion of the permittee. If the test result is less than the method QL, a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

(5) Analytical Methods: Analysis of Butyltins in Environmental Systems by the Virginia Institute of Marine Science, dated November 1996 (currently the only Virginia Environmental Laboratory Accreditation Program (VELAP) accredited method).

(6) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL listed above. If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(7) Dissolved sulfide may be measured by the total sulfide analysis. The total sulfide analytical test QL shall be less than or equal to the dissolved sulfide method QL listed above. If the result of the total sulfide analysis is less than the analytical test QL, dissolved sulfide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(8) Free cyanide may be measured by the total cyanide analysis. The total cyanide analytical test QL shall be less than or equal to the free cyanide method QL listed above. If the result of the total cyanide analysis is less than the analytical test QL, free cyanide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].